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ABSTRACT

This guide presents a statewide strategy to ensure that all South Carolina vocational educators are properly prepared to provide relevant basic skills reinforcement instruction as part of all vocational courses. The guide is organized in three sections. The first, a short section, answers the following questions: (1) Why should basic skills be reinforced in vocational education? (2) What are basic skills? (3) How are basic skills currently reinforced in vocational education? and (4) What is South Carolina's strategy for increased implementation? Following this section are sample lesson plans showing how the state-adopted basic skills objectives could be taught in vocational courses. Each lesson plan emphasizes one basic skill in one vocational course. Each lesson has an objective, suggested measurement strategy, competency, performance objective, basic skill, basic skill objective, instructional activities, instructional materials required, evaluation, assignment sheets with answer keys, and student self-check with answers. The final section of the guide is an annotated list of resources. (KC)

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REINFORCING BASIC SKILLS THROUGH VOCATIONAL EDUCATION

South Carolina Department of Education

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SOUTH CAROLINA DEPARTMENT OF EDUCATION

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Columbia, South Carolina 29201

March 1987

FOREWORD

The Basic Skills Assessment Program enacted by the South Carolina General Assembly in 1978 has provided the impetus for improved basic skills instruction and assessment in grades K-12. The Education Improvement Act of 1984 provides for additional emphasis on strengthening basic skills instruction. Beginning with the 1989-90 school year, the exit exam requirement for all high school graduates will continue to demonstrate the need for basic skills instruction in all curricula.

The South Carolina Vocational Education delivery system has responded to the basic skills development needs of vocational students through various methods of instruction. Vocational education students require not only academic basic skills, but also the vocational competencies that are necessary to become productive employees. Vocational teachers have always provided related basic skills instruction as a component of their respective vocational content areas. In this instructional setting, students can recognize the importance of basic skills and vocational competencies in the context of functioning as productive employees or pursuing further education.

The purpose of this guide, Reinforcing Basic Skills Through Vocational Education, is to present a statewide strategy to ensure that all vocational educators are properly prepared to provide relevant basic skills reinforcement instruction as part of all vocational courses. We encourage local school administrators to utilize this guide in assisting in the development of cooperative agreements among all public school educators that will provide a systematic method for emphasizing, reinforcing, and enriching basic skills in vocational education.

Moody Oswald, Director
Office of Vocational Education

ACKNOWLEDGMENTS

Staff members in the Office of Vocational Education are dedicated to the reinforcement of basic skills through vocational education. Their concern for the education of students enrolled in vocational courses has been the foundation for the preparation of this guide. The results of their work were coordinated by:

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TABLE OF CONTENTS

		Page
I.	WHY SHOULD BASIC SKILLS BE REINFORCED IN VOCATIONAL EDUCATION?	1
II.	WHAT ARE BASIC SKILLS?	2
III.	HOW ARE BASIC SKILLS CURRENTLY REINFORCED IN VOCATIONAL EDUCATION?	4
IV.	WHAT IS SOUTH CAROLINA'S STRATEGY FOR INCREASED IMPLEMENTATION?	5
V.	WHAT OTHER RESOURCES ARE AVAILABLE?	82

WHY SHOULD BASIC SKILLS BE REINFORCED IN VOCATIONAL EDUCATION?

The legislative provision of the Carl D. Perkins Act pertaining to academics and vocational education gives credence to the long-held belief of many educators that the mutually exclusive approach to curriculum is no longer applicable. This provision states the responsibility to "improve the academic foundations of vocational students and to aid in the application of newer technologies." The three-year goals for vocational education (1986-88) target the academic provision in this statement: "Modify or supplement vocational education curricula to include emphasis on related basic academic courses in order to help prepare all vocational students for passing the State high school exit exam in 1989-90."

In reality, this provision gives vocational educators the opportunity to become leaders in local, state, and national efforts to enhance and reinforce the basic skills of students and in fulfilling education's role; that is, educating the "whole" person and influencing that person to become a thinking, acting human being in today's world.

The unique characteristics of vocational programs make vocational education an effective arena for the development of basic skills. In fact, basic skills are already included as an intrinsic element of many courses in vocational curricula. The need for these skills is clearly recognized because of the close link between basic skills competency and successful job performance. The complexity of the world in which the student must function dictates that education interface what is learned with the realities and problems of living and working in the world beyond the classroom. Vocational education can do this in a realistic and meaningful manner.

WHAT ARE BASIC SKILLS?

There is no universal definition for the educational term "basic skills." The Basic Skills Improvement Act (Title II of Public Law 95-561) defines basic skills as including these skills: Reading, Mathematics, and Effective Communication. From this basis, various educators have expanded the definition to include skills from other academic areas, ranging from science and social studies to reasoning and problem-solving. A Nation at Risk: The Imperative for Educational Reform declared the "new basics" to be English, math, sciences, social studies, and computer science.

Vocational educators tend to define the concept in functional terms. Basic skills are critical assets that give the student greater flexibility and greater potential for success in a variety of endeavors:

- Completing a vocational training program
- Making the transition from school to work and successfully entering the job market
- Changing jobs
- Transferring task-related skills from one program or job to another
- Pursuing further education or retraining
- Seeking career advancement

The nature of the vocational curricula dictates that teachers include reinforcement of basic skills. The purpose of this guide is to assist administrators with inservice activities which demonstrate to vocational teachers the reinforcement of basic skills in vocational courses. To encourage the utilization of resources already developed in South Carolina, the basis of this text rests on

the basic skills objectives established by the South Carolina State Board of Education for grades 9-12. They are:

READING

Decoding and Word Meaning
Details
Main Idea
Reference Usage
Inference
Analysis of Literature

WRITING

Handwriting
Mechanics
Word Usage
Sentence Formation
Composition

MATHEMATICS

Concepts
Operations
Measurement
Geometry
Problem Solving

The integration and reinforcement of the state-adopted basic skills into vocational programs can follow many avenues. The following pages present a variety of ideas for administrators to employ during inservice training for vocational teachers. Teachers and administrators will quickly realize that basic skills are already being taught in many vocational courses; now these skills must be identified, enhanced, and reinforced.

In vocational education, basic skills improvement begins with full commitment from vocational administrators. Administrators must realize that the successful infusion of the two can exist only if teachers receive the necessary leadership. The positive attitude projected by administrators will influence the teachers' feelings about adding basic skills emphasis in existing courses and seeking new instructional activities to reinforce basic skills.

HOW ARE BASIC SKILLS CURRENTLY REINFORCED IN VOCATIONAL EDUCATION?

Attention to the necessity for emphasizing the improvement of students' basic skills through vocational education has been an aspect of curriculum development for some time. Four products are currently available for use by vocational educators in our state.

Word lists for each vocational program area have been developed from the South Carolina Basic Skills Word List and distributed to all vocational administrators. Teachers should have appropriate word lists and should be incorporating the words and definitions in their presentations to students.

An Applied Vocational Mathematics course was completed in July, 1984. Its purpose is to aid high school instructors in teaching mathematical problem-solving and computational skills to vocational education students. Numerous practical applications of mathematical principles are provided.

Vocational teachers need to be aware of students' reading abilities, and they need to be informed about strategies for strengthening weak reading skills. Teaching Reading in Vocational Education was designed to provide vocational education teachers with a resource to use in helping students develop sound reading skills.

The Principles of Technology course may be offered as an applied science course or the utilization of the concepts and materials may be a component of an existing vocational program. The program gives students an opportunity to learn math and science while applying them in realistic laboratory situations.

The State Department of Education has published the Teaching and Testing Our Basic Skills Objective handbook in connection with the Basic Skills Assessment Program. The purpose of this handbook is to provide educators with a tool for curriculum and instructional development which compliments the assessment of the State Objectives in Basic Skills. Teachers in many program areas use its activities to help students develop competent basic skills.

WHAT IS SOUTH CAROLINA'S STRATEGY FOR INCREASED IMPLEMENTATION?

Basic skills development can be implemented in many ways. The methods presented here are devoted to the emphasis and reinforcement of basic skills instruction within existing vocational programs. Suggestions and examples reflect this integrated approach. Local administrators who desire additional avenues and resources for enrichment of basic skills in vocational education may refer to the references listed in the back of this manual.

Cooperation between vocational educators and academic educators is essential in improving the basic skills of students enrolled in vocational courses. The Office of Vocational Education believes that basic skills instruction should be recognized as an important component of every curriculum and is committed to providing the resources necessary to reinforce the instruction of basic skills in vocational education. To ensure the development of a program which will fully utilize and extend the students' knowledge of basic skills, the Office of Vocational Education has worked closely with the Basic Skills Section of the Office of General Education. All vocational educators must recognize the necessity for this joint effort and personally commit to combining vocational education and academic education into education.

Vocational educators in South Carolina will be trained to assist vocational students in improving basic skills. Selected state personnel will receive in-depth training by professional specialists in this area. They will then present seminars and workshops at the annual vocational conference and at area schools and centers. The state personnel will train administrators; administrators will train teachers. The ultimate goal is total involvement of all vocational educators in this program.

The training will utilize video presentations of short episodes of instruction depicting emphasis on a basic skill in a vocational course. Proficiency in planning for the reinforcement of these skills will be strengthened. Each person participating in the training will receive a complete guide to use in developing basic skills emphasis in existing vocational courses. A planned, systematic approach will be demonstrated and will become the foundation for the recognition of opportunities vocational courses offer for providing reinforcement of basic skills.

To illustrate the ease of reinforcing basic skills through vocational education, lesson plans have been developed fusing the two areas. Reinforcing Basic Skills Through Vocational Education presents the state-adopted basic skills objectives as they could be taught in vocational courses. Each lesson plan emphasizes one basic skill in one vocational course. In many instances, teachers will be able to incorporate more than one basic skill when presenting a lesson.

The lesson plans are color-indexed for easy reference. Each basic skill objective is printed on red paper; this is an actual reproduction of a page from the Teaching and Testing Our Basic Skills Objectives handbook, which was distributed to each school district. Following the objective, lesson plans which outline methods for emphasizing the basic skill in a vocational course are presented. Program areas are color-indexed as follows:

Agricultural Education - sand beige

Business Education - computer blue

Health Occupations Education - complexion pink

Home Economics Education - cookbook yellow

Marketing Education - money green

Trade and Industrial Education - variety orange

TEACHING AND TESTING OUR BASIC SKILLS

READING

OBJECTIVE: Decoding and Word Meaning GRADE: 9-12

Objective

The student can use word recognition skills and can determine the meanings of words.

Suggested Measurement Strategy

Identifying the meaning of given words or terms. These may be words selected from a content field such as social studies or the sciences; terminology associated with product labels, application forms, consumer and governmental publications, and legal documents; words with one or more affixes; compound words; words with a synonym, antonym, homonym, or multiple meaning; words used connotatively; words used figuratively; or words defined by their context or orgin.

HEALTH OCCUPATIONS EDUCATION

Course: Health Occupations Education I; II

Unit: Applying the Principles of Cleanliness

Competency: Performing terminal disinfection.

Performance Objective:

Provided a simulated isolation unit that has been vacated, the necessary equipment and supplies, and an outside assistant, terminally disinfect the unit. The procedure must be performed without contamination.

Basic Skill: Reading

Basic Skill Objective:

The student can use word recognition skills and can determine the meaning of words.

Instructional Activities:

1. Read about terminal disinfection in your text, Nursing Skills for Allied Health Services, pp. 727-728.
2. Complete Student Assignment Sheet - Infection Control Crossword Puzzle.
3. Complete student self-check, Terminology.
4. Arrange with your evaluator to complete appropriate check-out and evaluation activities.

Instructional Materials Required:

Appropriate texts
Student assignment and self-check sheets

Evaluation:

The student will complete the check-out and evaluation activities according to specified criteria.

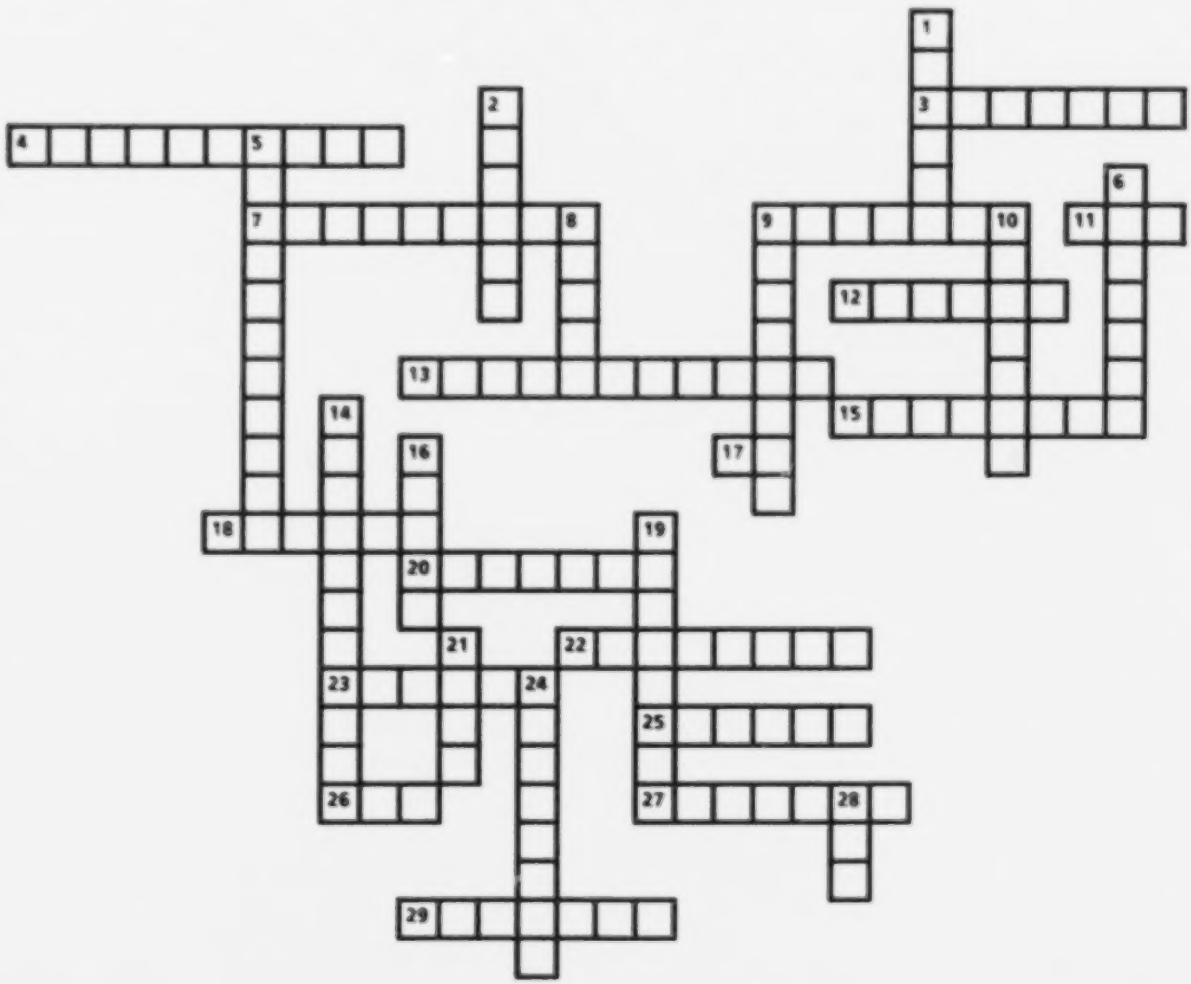
STUDENT ASSIGNMENT SHEET -- INFECTION CONTROL CROSSWORD PUZZLE

INFECTION CONTROL CROSSWORD PUZZLE

Choose a partner. Use the vocabulary list provided (if needed) and complete the puzzle. Do not linger on one answer. Go on and complete as many as you can (The instructor will provide clean copies of the puzzle.)

Use the words below to complete the puzzle.

Anaerobe	Fomite	Lesion	Pus
Carrier	Hands	Maintance	Septisol
Catheter	Housekeeper	Me	Sterile
Coccus	Infection	Medications	Sun
Control	Iodine	Nosocomial	Symptoms
Culture	Kiss	Nurse	Vector
Dietary	Lab	Oxygen	
Epidemic	Laundry	Patient	



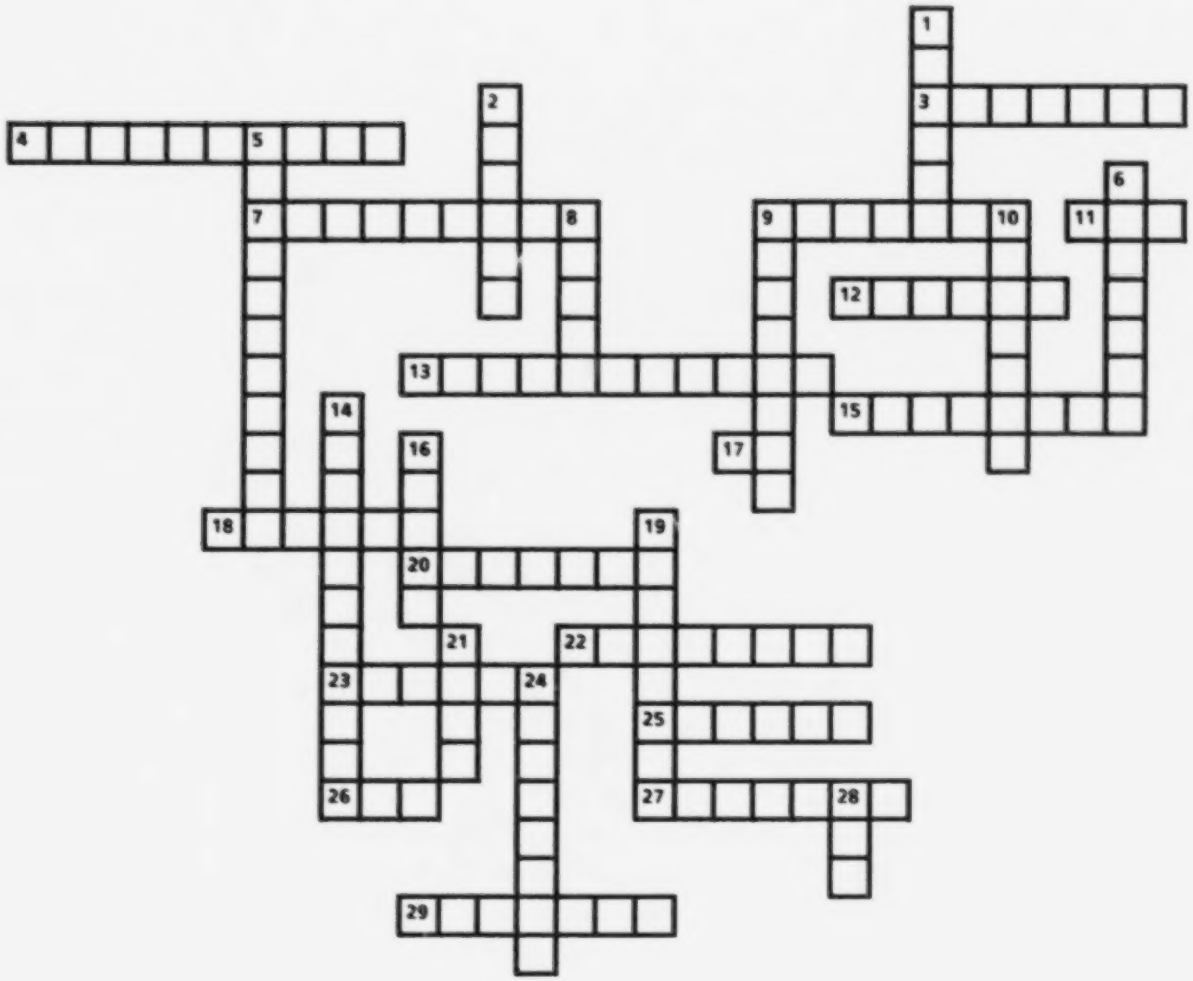
DOWN

1. A carrier (especially the animal host) which carries an infective agent
2. Contaminated object
5. The Department you call when the sink plugs up
6. The growth of microbes on or in nutrient
8. Florence Nightingale was one
9. Used to relieve the bladder of urine
10. The place that renders linens and clothing clean again
14. Obtained from the Pharmacy to assist in fighting infections
16. Two parts of your body which are considered to be the most frequent carriers of infection
19. What the patient tells you he/she feels due to his/her disease
21. The friendliest way to receive bacteria
24. It's an ____ when a disease affects many people in an area and spreads rapidly
28. The part of the hospital where the cause of disease is discovered

ACROSS

3. The person without symptoms of a communicable disease who harbors and disseminates an infectious organism
4. Hospital acquired infection
7. When your throat is sore, you have an _____
9. Many theories, procedures, and people work together to maintain the _____of infection
11. The drainage from an infected wound
12. Spherical shaped bacteria
13. Charwoman
15. A microorganism capable of living without air
17. Infection can be spread by _____
18. A wound
20. The _____Department is responsible for destroying food-related bacteria
22. The chemical disinfectant used at hospitals as a cleaning agent
23. Currently popular and effective mineral used for killing bacteria
25. An aerobe requires ____ for survival
26. The worst enemy of bacteria
27. After autoclaving an object is free of living organisms or _____
29. The reason hospitals exist

INFECTION CONTROL CROSSWORD PUZZLE
ANSWER KEY



STUDENT SELF-CHECK

Terminology

Match the words in Column A with their definitions in Column B. Record your answers on a separate sheet of paper. Check your answers against the key.

Column A		Column B	
1.	Disinfect	A.	Person outside isolation room
2.	Terminal	B.	Machine used to sterilize
3.	Contaminated	C.	To kill all microorganisms
4.	Concurrent	D.	Dirty, unclean
5.	Culture	E.	Person working inside isolation unit
6.	Autoclave	F.	Throwaway
7.	Sterilize	G.	To kill disease-causing organisms
8.	Incinerator	H.	At the same time
9.	Expendable	I.	To grow in a prepared medium
10.	"Clean" person	J.	Final
11.	"Dirty" person	K.	Furnance to burn trash

STUDENT SELF-CHECK

Terminal Disinfection

Read each statement and determine whether it is true or false. Record your answers on a separate sheet of paper. Compare your answers with the key.

1. After discharge of an "isolation patient," it is sufficient terminal disinfection to air the room one hour.
2. Gowns, masks, gloves, and booties are required in terminal disinfection.
3. When performing terminal disinfection, equipment is thrown away.
4. The equipment in an isolation unit is considered contaminated.
5. Linen from an isolation unit is "double bagged."
6. Terminal disinfection requires two people.
7. Articles that can be sterilized need not be wrapped.
8. Thermometers and otoscopes may be sterilized by autoclaving.
9. The "clean" person is inside the isolation room.
10. The patient is the "dirty" person.

STUDENT SELF-CHECK KEY

Terminology

1. G
2. J
3. D
4. H
5. I
6. B
7. C
8. K
9. F
10. A
11. E

STUDENT SELF-CHECK KEY

Terminal Disinfection

1. F
2. F
3. F
4. T
5. T
6. T
7. F
8. F
9. F
10. F

TEACHING AND TESTING OUR BASIC SKILLS

READING

OBJECTIVE: Details **GRADE: 9-12**

Objective

The student can accurately comprehend the details in a reading selection.

Suggested Measurement Strategy

Answering questions that ask "who", or "what", "where", "when", "why", "how", "how many", or "in what sequence" about information that has been directly stated in reading selections. These selections may be sets of directions; product labels; consumer, governmental, or legal documents; editorials, feature articles, or news stories; business letters; stories; poems; or excerpts from books or plays.

BUSINESS EDUCATION

Course: Business Law

Unit: Demonstrate Knowledge About Estate Planning

Competency: Describe how an existing will may be changed.

Performance Objective:

Given instruction in estate planning, the student will accurately change the details of an existing will according to specified criteria.

Basic Skill: Reading

Basic Skill Objective:

The student can accurately comprehend the details in a reading selection.

Instructional Activities:

1. Read the case, Matter of Estate of Weaver, 365 N.E. 2d 1038.
2. Role play the trial.
3. Without class discussion, have students answer the case questions.
4. Take up papers; then, discuss the case and the case questions.

Instructional Materials Required:

Business Law Textbook
Reprint of Matter of Estate of Weaver, 365 N.E. 2d 1039

Evaluation:

The student will correctly interpret the case questions according to the established criteria.

MATTER OF ESTATE OF WEAVER, 365 N.E. 2d 1039

Stanley Weaver, a patient in the Herrin (Illinois) Hospital, made a new will. He was 86 years old at the time. His wife had died in the hospital room across the hall on the day before the signing of the new will. In a former will, Weaver had left everything to his wife. In the event that she did not survive him, he had left everything (except $2,000) to his wife's nieces and nephews. In his new will, however, he left everything to four of his own nieces, leaving out his wife's nieces and nephews altogether. One of his wife's nephews, who would have inherited under the earlier will, contended that the new will should not be allowed on the ground that it was not properly signed. The statute of that state reads:

Every will shall be in writing, signed by the testator or by some person in his presence and by his direction and attested in the presence of the testator by two or more credible witnesses.

The Trial

One of the witnesses to the will was Joseph Helleny, 85 years old, who was a close friend of Stanley Weaver for over fifty years. Helleny testified that he was asked to go to the hospital to witness the will. When he arrived, the other witnesses, Willard Love and George Phillips, were there. Helleny said, "Hello, Stanley," and Weaver replied, "Hello, Joe." The will was read to Weaver in his presence and was explained to him. Helleny asked, "Stanley, do you understand this will?" and Weaver nodded his head. Helleny then asked, "Stanley, to whom do you want to make your will?" Weaver did not answer. Next Helleny asked, "Do you want to make it out to your nieces?" and Weaver nodded, without speaking. Helleny further testified that Weaver held the pen in his hand but someone else--he believed it was Love--held the top of the pen while Weaver was signing the will.

On cross-examination, Helleny testified, in part, as follows:

Q. Did Mr. Weaver hold the top or the bottom of the pen?
A. Mr. Weaver . . . . I don't remember, but anyhow he had his hand on the pen.
Q. Could it be possible that the other person had the pen in his hand and Mr. Weaver only had his hand on top of the pen?
A. No, sir. He had the pen. One of them had the pen, and the other touched the top of it.
Q. You are not certain just how the pen was in his hand?
A. No, sir. I know he touched the top of it.
Q. And you are not certain . . . .
A. I know he touched the top of it, and he moved the pen in his hand . . . . He signed his name when he moved his hand.
Q. Mr. Weaver didn't move the pen, but the other person holding the top of the pen moved it for him?
A. Mr. Weaver signed it. He signed his name.

The other witness who testifed was Willard Love, 76 years old, who had also known the testator for fifty years. Love testified that the will was read twice to Weaver. Love further testified that Weaver actually signed the document in his

presence, but that Weaver needed some help to hold the top of the pen. George Phillips helped him hold the pen as he (Weaver) wrote.
On cross-examination, Love testified, in part, as follows:

Q. Did Mr. Weaver ask or request Mr. Phillips to assist him in signing his signature?
A. Not to my knowledge.
Q. It was Mr. Phillips that did assist him?
A. Yes.
Q. And he did touch and hold the top of the pen?
A. Yes.
Q. And he did guide the signature?
A. Yes.
Q. Did Mr. Weaver say any words at all to Mr. Phillips prior to this matter for signing the will?
A. Not to my knowledge.
Q. Mr. Phillips just volunteered his services, is that right?
A. Yes.

The trial court held that it was not the testator's genuine signature because Mr. Weaver "was assisted or his hand was guided in making his signature by another person." The judge also said, "If the deceased had at any time stated or acknowledged that the will was his will, then I would have to rule for admission. However, since the evidence showed that all he did was to recognize two people and nod his head to leading questions, it is not enough."

The Arguments on Appeal

The nephew who objected to the allowance of the will argued that George Phillips actually signed the will by guiding Stanley Weaver's hand. He also argued that the testator failed to state, in the presence of the witnesses, that the instrument was his will and that he made it voluntarily.

Mr. Weaver's nieces argued that the signature on the will was not guided by someone else but was the actual signature of Stanley Weaver. They pointed out that both witnesses testified that it was Stanley Weaver who held the pen and that he signed the will. Both witnesses testified that without any request from Stanley Weaver to do so, George Phillips stepped forward and held the top of the pen while Weaver signed. He did not guide Mr. Weaver's hand. They both testified that Phillips merely held the top of the pen to steady it. They further maintained that there is no requirement in the law that the testator must verbally state that the instrument is his will.

Case Questions

1. Who has the stronger argument--Mr. Weaver's nieces who want the will allowed or the nephew who objected to the allowance of the will?
2. Based on your reading of the units in Part 8, what law or laws apply to this case? Explain.
3. If you were the appeallate court judge hearing this case, for whom would you decide? Why?

ANSWERS TO CASE QUESTIONS

1. The court held that Mr. Weaver's nieces have the stronger argument. Both witnesses to the execution of the will testified that it was Stanley Weaver who held the pen and that he signed the will. Both testified further that, without any request from Stanely Weaver to do so, George Phillips stepped forward and held the top of the pen while Stanley Weaver signed it. It was the testimony of the subscribing witnesses that the signature was that of Stanley Weaver and that George Phillips merely held the top of the pen "to steady it."

   The court further said: "There is no requirement that the testator verbally state that the instrument is his will. The statute governing the execution of wills does not require it and it is so held in the cases. If the testator acknowledges the instrument before the witnesses to be his act and deed, nothing more is necessary to satisfy the statutory requirement. Such acknowledgment need not be in language. Any act, sign, or gesture of the testator which indicates an acknowledgment of the will with unmistakable certainty will suffice."

2. Every will must be signed in such a way as to identify the will as that of the testator. In some states a will must be signed at the end, but in other states it is held to be valid if a signature is found anywhere in the will. The signing must take place in the presence of witnesses.

   The law specifies the number of witnesses who must be present at the signing of a will. Usually the number is two, although in some states it is three. Following the testator's signing, the witnesses must then sign in the presence of the testator and of each other.

3. The appellate court held in favor of Mr. Weaver's nieces, reversing the lower court's decision, saying, "The extensive questioning of the two subscribing witnesses on both direct and cross-examination and the answers thereto leave no doubt that the signature was that of the testator and that his hand was the moving force in placing his signature on the instrument."

   The court also said: "The witnesses Helleny and Love both testified that (1) they were present and saw the testator sign, (2) they signed (attested) in the presence of the testator, and (3) they each believed the testator to be of sound mind and memory at the time of the signing. There was no showing, or attempt to show, fraud, forgery, compulsion, or other improper conduct sufficient to invalidate the will. Accordingly, the instrument in question should have been admitted to probate since the requirements of the statute have been met."

TEACHING AND TESTING OUR BASIC SKILLS

READING

OBJECTIVE: Main Idea GRADE: 9-12

Objective

The student can determine the main idea of a reading selection.

Suggested Measurement Strategy

Identifying or generating statements that most accurately and comprehensively summarize the contents of reading selections. These selections may be paragraphs; editorials, feature articles, or news stories; business letters; essays; stories; or excerpts from books.

HOME ECONOMICS EDUCATION

Course: Family Life Education I

Unit: Exhibit attitudes and skills to manage interpersonal relationships in a family setting

Competency: Use positive communication techniques to strengthen interpersonal relationships.

Performance Objective:

After reading the article "How to Fight Fair" in the November, 1986, issue of Choices, the student will write a summary of at least 100 words explaining why conflict is a part of every relationship, identifying three ways to deal with anger, and listing five ways to handle conflicts constructively.

Basic Skill: Reading

Basic Skill Objective:

The student can determine the main idea of a reading selection.

Instructional Activities:

1. Read article "How to Fight Fair."
2. Answer questions related to arguments presented in article.
3. Complete "How to Fight Fair" Evaluation sheet.

Instructional Materials Required:

Article from November, 1986, issue of Choices magazine Evaluation Sheet

Evaluation:

The student will write a summary of at least 100 words telling why conflict is a part of every relationship, identifying three ways to deal with anger, and listing five ways to handle conflicts constructively.

HOW TO FIGHT FAIR
HANDLING CONFLICT WITHOUT LOSING A FRIEND
(OR BROTHER OR SISTER)

Conflicts are a natural part of every relationship. But they don't have to end in screaming arguments. There are ways to communicate fairly and get results--without losing self-control.

Arguments happen in every family. We know that, because we talked to a number of teens over the past few weeks. They told us not only that members of their families "fight," but also what they "fight" about. Here is a typical argument between siblings, for example. Does it sound familiar?

Cal, 17, and Matt, 14, of Chicago, share a small bedroom in an apartment. As Cal recently told Choices, he was looking all over their room for his house keys. He was late for a part-time job and was practically tearing the room apart to find them. He'd lost his keys twice before, and it had cost him time and money to replace them.

Matt, his brother, is a "neatnick," says Cal. When he walked in on Cal, Matt had a fit. "Get your hands off my things!" he yelled. "You're messing up my side! You make everything a pigsty."

Recalling that moment, Cal says he really blew it. "Matt always calls me a slob, and his picky neatness drives me nuts. So I pushed him, he pushed me back--and of course it turned into a real battle."

A "real battle" is a conflict where the fighters have lost self-control. They're not concerned with communicating fairly. Instead, each wants to win. What happens? They both lose. Cal doesn't find his keys. Matt gets a messed-up room. And they both end up tense and angry, without resolving their conflict.

Believe it or not, Cal and Matt usually get along. They don't fight constantly or bitterly, as some siblings do. But as in all relationships, they have conflicts of interest, where each wants different things at the same time (the keys vs. the neat room).

CONFLICT IS JUST PLAIN NATURAL

"In every intimate human relationship--among family members, friends, or romantic partners--love and conflict coexist," says Dr. Sally Lloyd, professor of family and consumer studies at the University of Utah. "The trick is not to avoid conflict, but to deal with it successfully."

Conflict, in fact, is good for relationships. Dr. Lloyd studied 100 people who fell in love but broke up rather than get married. "They broke up because they simply didn't know how to get angry, disagree, and argue fairly," she says.

GET ANGRY--BUT CONTROL IT!

The first step in learning skills to resolve conflicts is to understand your own anger. "Anger is essentially a basic emotional response to stress," writes Dr. Willard Gaylin in The Rage Within (Simon & Schuster). "Anger causes us to protect our own best interests and is necessary for survival," Dr. Gaylin explains.

"Teens are going through special changes that can make being angry feel explosive," says Dr. Robert Hendren, Chairman of the Committee on Adolescence, of the American Academy of Child Psychology. They're experimenting with their first close peer relationships. They're struggling to become independent from their parents. Most important, they're forming their own identities.

The Kentucky Prevention of Family Violence Curriculum, a program designed for home economics classes, spells out the issue of anger:

"Everyone gets angry. It is a normal, healthy emotion. If, however, you cannot control your anger . . . . it can lead to violence (a sort of emotional violence, or even physical violence)."

There are three ways to deal with anger, the program explains:

You can "stuff it." But if you "stuff" or hide anger, you may become withdrawn or depressed. And one day you're bound to explode.

You can "escalate it." But if you blow up, blame others, and call them names, your anger has a good chance of working up into violence. That's the worst way to handle your feelings.

You can "direct it." When you say to someone, for example, "I feel angry when you're late," you're directing your anger squarely and taking the responsibility not only for resolving the conflict, but for making yourself feel better.

Are you a "stuffer"? An "escalator"? A "director"? Even if you have problems with your anger, you can still learn to fight fair and get results.

HOW TO HANDLE CONFLICTS CONSTRUCTIVELY

A good way to learn to resolve conflict is to watch your parents fight fair, write Dr. George Back and Peter Wyden in The Intimate Enemy: How to Fight Fair in Love and Marriage (Avon Brooks). For this reason, Dr. Bach encourages parents to argue in front of their children.

That sounds great, but what if your parents don't fight fair and aren't a good example? Fortunately our experts' tips can help:

1. When you feel you're getting ready to blow up, imagine a big red STOP sign in front of your eyes," says Dr. Roger Bach, psychotherapist at the Bach Institute for Group Psychotherapy in Los Angeles. "The first step," he says, "is to halt your growing rage. This may mean taking a deep breath, or walking away for a few minutes."

2. "Identify your feelings to yourself," says Dr. Robert Hendren. Ask yourself some very important questions: What am I really angry about? Do I have a good reason to be angry with the other person, or have I been looking for an excuse to hurt him or her? Am I picking a fight because I'm in a bad mood? Or am I really mad at someone else but afraid to let that person know?

3. "If you feel you're right to be angry and you need to argue, make sure you choose your time and place carefully," says Dr. Sally Lloyd. Don't try to

resolve arguments when you've got five minutes between classes or you're about to eat dinner. You might say, for example, "We're both mad. Let's talk after dinner (or on the phone at nine tonight, if the ongoing argument is outside of the family)."

Supposing the other person says, "No way! Let's have it out here and now." You might answer, "Look, this is too important for both of us to spend only a few minutes on. I think we both need time to talk and listen. And even if you don't feel you need the time, I do."

4. "The single most important thing is to talk--and feel," says Dr. Hendren. You don't have to recite your feelings like a shopping list to get them across. "Put some emotion in your voice," says Dr. Hendren. Be firm when you say, for example, "I really need to tell you how I'm feeling about our relationship." The point is, to express your feelings without losing control of them.

5. "Once you're talking, stick to one issue at a time. It's too easy to dump on the other person and say everything that's wrong with him or her." For example, if you've been stood up by a friend, tell the person you're mad. But don't use the argument to attack your friend's "big mouth," her lousy choice of clothes, or the time she stole your boyfriend. "Those are separate issues," says Dr. Lloyd.

6. "Don't blame or accuse the other person. Use 'I' (put the emphasis on yourself) to get your point across," says the Kentucky Prevention of Family Violence Series curriculum. For example, instead of saying, "You never listen to me," you might say, "I feel I'm not being listened to when I talk."

   By expressing your point of view, you make it easier for the other person to express his or hers without feeling threatened.

7. "You may have to repeat your point to get it across," says Dr. George Bach. Fair arguing calls for good communication skills. You may have to say more than once, for example, "I feel like you expect too much from me," or "I hate it when you're late."

8. "The secret of fair fighting is arguing not to win, but to seek resolutions that work for both of you. You don't have to win--and see the other person lose--to get results. Both parties win if they can keep their self-esteem in a fight and learn something from it," says Dr. Lloyd. For example, you don't have to call your friend names to let him know that it hurts to be stood up. Letting your friend know how you feel can help him change.

9. "Listen carefully to everything the other person has to say. Be prepared to change things about yourself, too," Dr. Roger Bach says. If your friend tells you she is late because she always comes by your house to get you, it may be time to meet halfway between her house and yours.

10. "Once the argument is over you must forgive," says Dr. Hendren. Forgiving is letting go of the anger that sparked the fight. A good last question to ask yourself and the other person is, "Have we gotten everything off our chests?" Then a handshake, or hug, is a good way to end an argument.

Remember Cal and Matt? Imagine this instant replay:

Cal is searching for his keys when Matt walks in. "What are you doing?" Matt cries. "You're messing up my side of the room! Put everything back."

Cal feels angry, but stops himself from yelling. He imagines the big red STOP sign we mentioned. And he also takes a breath. Then he tries to communicate. "Listen, you may be right, and I'm sorry. But I'm late for work and I can't find my keys. If you help me find them, I'll clean up the room as soon as I get home. And if you're still mad, let's argue then."

Matt's still angry, too. "But you're always messing up my side! And you always lose things."

Now Cal really has to control himself. He's even madder because Matt is right. But he tries even harder to communicate. "Look, you're right. We're different. I'm a slob, and you're neat. I'll try to be a little neater. But right now I've got to find my keys because I'm late for work." (Notice how Cal repeats the issue, which is the lost keys.) Then he says, "Let's talk when I get home."

"Oh, all right," says Matt. (And maybe he kicks the bed--which is far better than kicking Cal!)

Now that's a fair fight.

ARGUMENT #1:

SHE: I hope you're satisfied. You ruined my cassette tape.

HE: How?

SHE: You wore out my walkman batteries. It ate up my Goose Wintersteen tape!

HE: I'm sorry, Sis. I'll buy you a new cassette. And new batteries, too.

SHE: It's not the same. Josh bought me that tape.

HE: So? I'll give him the money and he can buy the new tape.

SHE: If only you didn't listen to heavy metal so much. "Mega-Noise" is rotting your brain. I would never listen to one tape for three hours.

HE: Your brain would never last that long.

At what point did this argument turn "unfair"? Circle the right answer(s).

a. When she brought Josh into the argument.

b. When she didn't stick to the issue and accused his taste in music of rotting his brain.

c. When he argued back.

ARGUMENT #2:

HE: There you are, Sis!

SHE: I was at the library. What's wrong?

HE: Blue socks!

SHE: Huh?

HE: My white socks are all dirty! You wore the last pair without telling me. Now I've got to wear blue socks to basketball practice, and look like a geek.

SHE: I'm sorry but--

HE: Practice starts in 10 minutes and my white socks smell like a toxic-waste dump, thanks to you!

SHE: Well, if you didn't use all of my hair mousse . . .

HE: Don't try to change the subject. You're a sock-stealer!

SHE: I wouldn't worry about what the boys think of your blue socks. They'll all be looking at your hair.

HE: Why? (Thinks a minute.) Oh, no! Did you tell them I used your mousse for my last date? I'll be kidded to death! Did you tell them?

(Looking at his watch, he runs off to practice.)

Why isn't this a "fair" argument? Circle the right answer(s).

a. He should have been happy to loan her his socks.

b. She took unfair advantage, talking about the mousse.

c. He started an argument when he knew there was no time to resolve it.

ARGUMENT #3:

HE: Saturday night again--you got plans?

SHE: Sheila and I are going to the concert.

HE: How'd you get tickets? It's been sold out for months.

SHE: I won the radio station raffle.

HE: You won it? I entered it, too.

SHE: Only one person could win. You'll win next time.

HE: Ha. You always win things like that.

SHE: No I don't.

HE: Yes you do. Remember that spelling bee last year?

SHE: Is it my fault you can't spell?

HE: That was pure luck! You got the word camera. I got the word ratatouille. Maybe you're not so lucky, after all--maybe you cheat.

SHE: No I don't!

HE: Truth hurts!

SHE: You're just a sore loser.

Why isn't this a "fair" argument? Circle the right answer(s).

a. She shouldn't have rubbed it in that she was going to the concert.

b. He should have dealt more with his own anger and not called her a "cheat."

c. He had no right to let her know he was upset about missing the concert.

ANSWERS TO "FIGHTING FAIR" ARGUMENTS

ARGUMENT #1:

At what point did this argument turn "unfair"? Both b and c are correct.

a. Wrong. By bringing in Josh, she explained why her tape had special value to her. But that doesn't make the argument unfair.

b. Right. She didn't stick to the issue, an important part of "fighting fair." He offered to pay for the damages, but she felt the need to attack his taste in music.

b. Right. It would have been better if he hadn't argued back. All it does is to turn a conflict into a name-calling free-for-all.

ARGUMENT #2:

Why isn't this a "fair" argument? Both b and c are correct.

a. Wrong. Whether or not he wanted to loan her socks has little to do with the argument.

b. Right. She did try to change the subject by embarassing him about the mousse, which isn't fair.

c. Right. He started an argument when he knew there was no time to resolve it. He was on his way to basketball practice.

ARGUMENT #3:

Why isn't this a "fair" argument? Only b is correct.

a. Wrong. She didn't really rub it in at all.

b. Right. Had he admitted his feelings--"I never win anything"--they could have talked it out. Instead, he took out his anger on her and accused her of "cheating."

c. Wrong. Of course he had a right to let her know his feelings, but again, had he talked about them honestly, there would have been no argument.

Evaluation Sheet
"How to Fight Fair"

1. Write a summary telling why conflict is a part of every relationship. Your summary must be at least 100 words. Use back of sheet if necessary.

2. There are three ways people deal with anger. Identify these three ways.

3. List at least five ways conflicts can be handled constructively.

TEACHING AND TESTING OUR BASIC SKILLS

READING

OBJECTIVE: Reference Usage **GRADE: 9-12**

Objective

The student can locate and utilize desired information in reference sources.

Suggested Measurement Strategy

Locating and utilizing requested information in reference sources such as books' tables of contents, indexes, glossaries, appendixes, and bibliographies; dictionaries; thesauruses; encyclopedias; the library card catalog; the Reader's Guide; graphs; tables; charts; maps; atlases; telephone directories; and newspapers.

Course: Auto Mechanics I

Unit: Engine service skills

Competency: Change engine oil and oil filter.

Performance Objective:

Given instruction, service manual and proper tools the student will demonstrate the ability to use the service manual to determine the proper weight and amount of engine oil and the proper oil filter to use when changing oil and filter for a given engine.

Basic Skill: Reading

Basic Skill Objective:

The student can locate and utilize desired information in reference sources.

Instructional Activities:

1. Explain the properties of oil.
   a. Viscosity -- body and fluidity
   b. Viscosity ratings
   c. Resistance to carbon formation
   d. Resistance to oxidation
   e. Foaming resistance
   f. Detergents
   g. Viscosity index
2. Explain the function of oil filters.
   a. Purpose
   b. Type
3. Demonstrate the use of service manuals.
   a. Specific manual
   b. General or generic manual
4. Conduct guided practice by looking up values in both manuals for various model cars.
5. Closure:
   List the seven properties of oil.
   What are the two types of oil filter systems?
   There are two types of oil filter units; what are they?
6. Use Job Sheet #AMI 3.1.4 and #AMI 3.1.5.

Instructional Materials Required:

Job Sheets #AMI 3.1.4 and #AMI 3.1.5
Service Manual for available engines
Motor Auto Repair Manual for engine years

Evaluation:

The student will follow the procedures indicated on Job Sheets #AMI 3.1.4 and #AMI 3.1.5 to change oil and oil filter on the assigned engine.

Job Sheet #AMI 3.1.4 Name_____

Engine Oil Change

Statement of learning: To learn how to properly change engine oil.

Narrative description: A satisfactory engine lubricating oil must have certain characteristics to make possible minimum wear or low frictional loss between adjacent moving surfaces. From the day that fresh oil is put into the engine crankcase, it begins to lose its effectiveness as an engine lubricant. This gradual loss of effectiveness is largely due to the accumulation of various contaminating substances. Even though the engine has an oil filter, some contaminants will remain in the oil. Unless that oil is drained and clean oil put in and a new oil filter installed, engine wear will increase rapidly. Use of service manuals will insure the proper type and amount of oil is put in the engine.

Instructional Materials Required:

Service Manual for available engines
Motor Auto Repair Manual for engine years

Procedure:

1. Secure proper service manual.
2. Look up oil type and amount.
3. Apply parking brake and block wheels.
4. Bring engine to normal operating temperature and turn off.
5. Remove oil drain plug and drain engine oil.
6. Clean drain plug and inspect gasket. Replace gasket if damaged.
7. Verify that gasket is properly located. Correct as required.
8. Reinstall oil drain plug and tighten to specification.
9. If the oil filter is not to be changed, remove the oil filler cap and fill the crankcase with the specified amount, type and grade of oil.
10. Reinstall the oil filter cap; start the engine and inspect for oil leak(s). Correct as required.

Questions:

1. Using the service manual, determine the amount and type oil to use when changing oil for this engine. Describe the properties of the type oil specified.

2. What determines how often the oil should be changed? What conditions could change this period?

3. Should you choose a higher or lower viscosity oil in winter than summer and why?

Job Sheet #AMI 3.1.5 Name_____

Engine Oil Filter Change

Statement of learning: To learn how to properly change the engine oil filter.

Narrative description: Depending on the type of oil filter system your engine has, some or all of the oil from the oil pump circulates through the filter. Filters are of two types, those which filter part of the oil from the oil pump (called bypass filters), and those which filter all the oil in circulation through the system (called full-flow filters).

In the oil filter is a mass of filtering material that traps particles of foreign matter. The filter thus helps to keep the oil clean and prevents the particles from entering the engine where they might damage bearings or other engine parts. Filters are of two types, the disposable (cartridge) type or the replaceable element type. The filter or filter element should be replaced periodically to maintain filtering efficiency.

Instructional Materials Required:

Service Manual for available engines
Motor Auto Repair Manual for engine years

Procedure:

1. Secure proper service manual.
2. Look up oil filter type.
3. Disposable type oil filter change:
   a. Remove oil filter and discard.
   b. Clean the gasket sealing surface at the cylinder block or adapter.
   c. Coat the gasket on the filter with a light film of oil; screw the filter onto the adapter or cylinder block, until the gasket contacts the sealing surface; then, advance it an additional 3/4 turn.
4. Replaceable element type oil filter change:
   a. Place a drip pan under the filter. Remove the filter center bolt; then, remove the filter assembly and gasket. Discard the gasket.
   b. Remove the filter element, neoprene gasket, spring and seal; then remove the center bolt from the container and the fiber gasket from the bolt.
   c. Wash all parts in solvent. Make sure the openings in the bolt are clean.
   d. Install the new filter element in the housing, following the instructions furnished with the new element.
   e. Clean the cylinder block filter recess. Install a new gasket.
   f. Place the filter assembly in position and thread the center bolt into the adapter, finger tight.
   g. Rotate the filter assembly slightly, in each direction, to make sure the gasket is seated evenly.
   h. Tighten the filter center bolt to specification. DO NOT OVER-TIGHTEN.
   i. Remove the oil filler cap and fill the crankcase with the specified amount, type and grade of oil.
   j. Reinstall the oil filter cap; start the engine and inspect for oil leak(s). Correct as required.

Questions:

1. Using the service manual, determine the type oil filter to use for this engine. Describe the type oil filter specified.

2. What determines how often the oil filter should be changed? What conditions could change this period?

3. List in sequence the steps to take when removing the fiber gasket from the center bolt on a replaceable element type oil filter.

4. How far should disposable type filter be screwed onto the adapter or cylinder block?

TEACHING AND TESTING OUR BASIC SKILLS

READING

OBJECTIVE: Inference **GRADE: 9-12**

Objective

The student can make valid inferences about a reading selection.

Suggested Measurement Strategy

Identifying or generating reasonable answers to questions about information not directly stated in reading selections. The questions asked may require determining themes or authors' purposes, making comparisons, deducing causes and effects, drawing conclusions, predicting outcomes, or applying information presented in selections to different situations. The selections may be paragraphs, essays, editorials, feature articles, news stories, letters, stories, poems, or excerpts from books or plays.

AGRICULTURAL EDUCATION

Course: Forestry

Unit: Orientation to Forestry Occupations

Competency: List at least five work stations in your community which would provide training in occupations related to forestry occupations.

Performance Objective:

Given appropriate reference materials and instructional activities, the student will make accurate inferences about work stations from related reading and contacts about forestry occupations.

Basic Skill: Reading

Basic Skill Objective:

The student can make valid inferences about a reading selection.

Instructional Activities:

1. Assign selections from textbooks and references for student to read.
2. Identify businesses in the area related to the forestry industry.
3. Have student conduct interviews with people employed in forestry businesses.
4. Survey employment needs.
5. Have student prepare report describing work stations which would provide training related to forestry occupations.

Instructional Materials Required:

Textbooks
Opportunities in Forestry Careers by Christopher M. Wille
Magazines and other publications
Employees in forestry occupations
Federal and state agencies

Evaluation:

The student will complete assigned activities and prepare report stating appropriate work stations.

OBJECTIVE: Analysis of Literature GRADE: 9-12

Objective

The student can critically analyze a reading selection.

Suggested Measurement Strategy

Making critical judgments or answering questions that ask for analyses of the structure or content of reading selections. The questions may require identifying a selection's genre (editorial, essay, etc.); identifying structural elements (plot, point of view, etc.); identifying rehetorical devices (poetic language, propaganda techniques, etc.); or identifying the nature of the information presented (fact, opinion, etc.). The selections to be analyzed may be paragraphs, essays, editorials, feature articles, news stories, letters, advertisements, stories, poems, or excerpts from books or plays.

BUSINESS EDUCATION

Course: Business Entrepreneurship

Unit: Determine your potential as an entrepreneur

Competency: List your entrepreneurial skills.

Performance Objective:

Given instruction in entrepreneurship as a career, the student will accurately identify skills required for success as an entrepreneur.

Basic Skill: Reading

Basic Skill Objective:

The student can critically analyze a reading selection.

Instructional Activities:

1. Read the characterisitics of a successful entrepreneur.
2. Complete Activity 1.
3. Count the checks beside the answers and rate your potential.
4. Discuss the characteristics of a successful entrepreneur.

Instructional Materials Required:

Guide, Entrepreneurship Training in Vocational Education, 1986

Evaluation:

The student will correctly interpret the questions according to the established criteria.

Characteristics

of a Successful Entrepreneur

Successful small business owners usually have strong organizational ability, drive, and leadership. Since the typical store owner may work long hours, good physical and mental health are necessary. A successful owner-operator, on a daily basis, closely supervises the operations that can spell success or failure for a business, such as: buying, selling, building and inventory supervision, recordkeeping and reporting, personnel supervision, and customer relations.

There are many characteristics that an entrepreneur must possess. But the time to evaluate these characteristics necessary for success is **before**, not **after**, a business is started. One way for the future retail operator to understand his or her own personal qualities better is through **self-evaluation**. Self-evaluation is an examination of one's own qualities, abilities, and background. Self-evaluation should reflect your honest feelings. Care must be taken not to allow emotions to influence your responses or answers unnecessarily.

Effective self-evaluation can often be accomplished by using a form of a rating scale or checklist. Frequently employers use this method to evaluate their employees. Perhaps you will evaluate future employees by a method similar to the one that follows.

The Small Business Administration (SBA) makes available a rating scale designed for self-evaluation for those interested in going into business. Although certainly not the only consideration for judging personal characteristics needed for retail ownership, it is at best one indication. The opinions of business associates, friends, and family members can also prove helpful.

Activity 1: How Do I Rate?

Read each question. Read each answer (three for each question) carefully. Take a moment and reflect on your background and experience and answer honestly. Check the answer that actually reflects your honest reaction, not just the one that sounds good.

RATING SCALE FOR GOING INTO BUSINESS

1. Are you a self-starter?
   _____I do things on my own. Nobody has to tell me to get going.
   _____If someone gets me started, I keep going all right.
   _____Easy does it. I don't put myself out until I have to.

2. How do you feel about other people?
   _____I like people. I can get along with just about anybody.
   _____I have plenty of friends; I don't need anyone else.
   _____Most people irritate me.

3. Can you lead others?
   _____I can get most people to go along when I start something.
   _____I can give the orders if someone tells me what we should do.
   _____I let someone else get things moving; then I go along if I feel like it.

4. Can you take responsibility?
   _____I like to take charge of things and see them through.
   _____I'll take over if I have to, but I'd rather let someone else be responsible.
   _____There's always some eager people around wanting to show how smart they are. I say let them.

5. How good an organizer are you?
   _____I like to plan before I start. I'm usually the one to get things lined up when the gang wants to do something.
   _____I do all right unless things get too goofed up; then I quit.
   _____You get all set and then something comes along and ruins it; so I just take things as they come.

6. How good a worker are you?
   _____I can keep going as long as I need to. I don't mind working hard for something I want.
   _____I'll work hard for a while, but when I've had enough, that's it!
   _____I can't see that hard work gets you anywhere.

7. Can you make decisions?
   _____I can make up my mind in a hurry if I have to. It usually turns out OK.
   _____I can if I have plenty of time. If I have to make up my mind fast, I think later I should have decided the other way.
   _____I don't like to be the one who has to decide things. I'd probably be wrong.

8. Can people trust what you say?
   _____You bet they can. I don't say things I don't mean.
   _____I try to be on the level most of the time, but sometimes I just say what's easiest.
   _____What's the problem if the other fellow doesn't know the difference?

9. Can you stick with it?
   _____If I make up my mind to do something, I don't let anything stop me.
   _____I usually finish what I start--if it doesn't get fouled up.
   _____If it doesn't go right away, I turn off. Why beat your brains out?

10. How good is your health?
   _____I never run down!
   _____I have enough energy for most things I want to do.
   _____I run out of energy sooner than most of my friends.

Now count the checks you made.

_____How many checks are there beside the first answer to each question?
_____How many checks are there beside the second answer to each question?
_____How many checks are there beside the third answer to each question?

If most of your checks are beside the first answers, you probably have what it takes to run a business. If not, you're likely to have more trouble than you can handle by yourself. Better find a partner who is strong on the points you're weak on. If many checks are beside the third answer, not even a good partner will be able to help you.

SOURCE: SMA Bulletin 71, Small Business Administration, Washington, D. C.

TEACHING AND TESTING OUR BASIC SKILLS OBJECTIVES

WRITING

The five state-adopted writing objecties are Handwriting, Mechanics, Word Usage, Sentence Formation, and, most important, Composition. Today, as in the past, the first four objectives are often taught in isolation from the actual writing process; however, these objectives should be integrated with the teaching of composition as a whole. There is no guarantee that students can use skills taught in isolation (grammar lessons, sentence-combining lessons, etc.) unless those skills are subsequently applied in actual writing situations. **Each of these skills should be taught in the context of a student composition.**

Handwriting: The student can write legibly.

Significance

A prerequisite for a written communication is that it is readable. Writing cannot be understood unless the student's handwriting is clear enough to be read.

Mechanics: The student can spell, capitalize, and punctuate correctly.

Significance

As in the case of handwriting, correct spelling, capitalization of words, and punctuation permit a reader to understand a written communication.

Word Usage: The student can use words appropriately.

Significance

The use of words that are grammatically correct for the context and audience is important for understanding communication. Word Usage includes skills such as subject-verb agreement and the selection of appropriate words to communicate the intended message.

Sentence Formation: The student can compose sentences.

Significance

The organization of thoughts into sentence structures that are recognizable and understandable by the reader is important to communication. All sentences should contain at least one complete thought, which usually means the presence of a subject and a predicate. To avoid problems such as run-ons and fragments, the student must know to capitalize at the beginning of a sentence and to use correct punctuation at the end of a sentence.

Composition: The student can communicate ideas in writing.

Significance

The communication of ideas in writing, in a sense, is composition. All of the previously mentioned objectives are necessary and important parts which aid in communication; however, emphasis on the communication as a whole is the most important consideration.

No type of writing is pure since most writers combine and integrate a variety of writing types when producing a single composition. Four basic types are developed as context vehicles in the writing process. They are narration, description, exposition, and persuasion. A definition and the specific skills for each type are provided.

STEPS OF THE WRITING PROCESS

Explicit steps related to each stage of the writing process are presented and summarized to help teachers and students view the writing process as a teachable and learnable procedure.

Prewriting

1. Identify the purpose of the writing task (PURPOSE).
2. Select a specific writing topic (TOPIC).
3. Identify the audience (AUDIENCE).
4. Determine the type of information needed (CONTENT).
5. Gather the specific information needed (CONTENT).
6. Develop a plan for organizing the information in the composition and the composition itself (ORGANIZATION).

Writing the First Draft

7. Write a lead or topic sentence.
8. Write a first draft of the composition.

Revising

9. Evaluate the composition using the appropriate checklist (PURPOSE, TOPIC, AUDIENCE, CONTENT, ORGANIZATION, FORM).

Writing Additional Drafts

10. Revise or rewrite the composition.

Editing - Proofreading

11. Proofread the composition (FORM).

Writing the Final Draft

12. Write the final draft of the composition and proofread.

Evaluating

13. Obtain general and specific feedback about how well the writing task was accomplished.
14. Use feedback to improve writing.

Publishing

15. Share the composition.

NARRATION

Definition

Narrative writing is defined as relating events which occur over some period of time. Both the substance of the events and the order in which they occur are communicated to the reader. Through narration, a writer may give an account of real or invented events. Whether fictional or non-fictional, effective narration requires a writer not only to compose a clear sequence of events but also to provide elaboration for them.

Specific Skills

1. Sequential Ordering

   The student should be able to arrange a series of events in sequential order. This includes the ability to determine which event in the series occurs first, second, third, etc., and the ability to use words and phrases that denote sequence such as "first," "last," "just before," "just after," "now," "later," "next," and "then."

2. Elaboration of Events

   The student should be able to provide details about the events in a narrative. Elaboration may take one of two basic forms:

   (a) descriptive information included within the context of narration (describing the people and places involved in the events) or

   (b) specific details of the events themselves ("I rode the bus for twenty minutes and got off at Greenpark Road. Then I walked very slowly for half a mile on the dirt path until I reached the house" instead of simply writing "I went to the house").

NARRATION REVISION CHECKLIST

Directions: Use this checklist to assist you in writing your composition.

COMPOSITIONAL ELEMENTS

_____Purpose

clearly stated
The composition tells what happened over some specified period of time.

_____Topic

on the assigned topic
The composition addresses the topic required by the writing task.

_____Audience

specified audience appropriately addressed
The tone of the composition and the language used are appropriate for the intended readers. (For example, slang could be used when writing to classmates but not in writing to the principal.)

_____Content

narration of a clear sequence of events
The compcsition makes clear what happened, in what order, and when.

elaboration of the events
The composition does not just tell "what" happened but also lets the reader know "why" or "how" something happened.

_____Organization

unified focus
The entire composition is on one subject and does not wander.

beginning, middle, and end
The composition introduces the topic to the reader, discusses the topic, and brings the topic to conclusion.

smooth flow development
The composition flows smoothly from idea to idea. The composition sufficiently develops the topic.

_____Form

handwriting
The composition is legible.

mechanics
The punctuation, capitalization, and spelling are correct.

word usage
Words are used in the appropriate context. There is subject-verb agreement, correct pronoun usage, etc.

sentence formation
Sentences are complete with subjects and predicates. There are no run-ons or fragments.

Course: Fashion Merchandising

Unit: Fashion Show Production

Competency: Identify the responsibilities of the director, coordinator, and publicity chairperson in producing a fashion show.

Performance Objective:

Given advance instruction, the student will list the responsibilities of a fashion show director, coordinator, and publicity chairperson.

Basic Skill: Writing

Basic Skill Objective:

The student can write a narration composition conforming to the purpose, topic, audience, content, organization and form as specified on the narration revision checklist.

Instructional Activities:

1. Have the students list all the responsibilities involved in producing a fashion show and then designate the person responsible for each activity.
2. Using a transparency listing the responsibilities of the director, coordinator and publicity chairperson, discuss in detail each responsibility.
3. Have the students compose a sample script for a fashion show.
4. Have the students complete wardrobe cards on the outfits they are wearing and those of several other students and/or from pictures in magazines.
5. Have the students write a sample news release on a fashion show.
6. Have students produce a fashion show and let students assume these responsibilities.

Instructional Materials Required:

News release forms
Script forms
Wardrobe cards
Transparency of responsibilities of director,
coordinator, and publicity chairperson

Evaluation:

Given a list of responsibilities for a fashion show, identify the responsibilities of the director, coordinator, and publicity chairperson in producing a fashion show.

DESCRIPTION

Definition

Descriptive writing is defined as the portrayal of people, places, objects, emotions, or events using appropriate details. An effective description will contain sufficient and varied elaboration of details to communicate a complete sense of the subject being described. Details can also be used to communicate the writer's feelings about the subject being described. Often these details are sensory ones, selected to describe what the writer sees, hears, smells, touches, and tastes.

Specific Skills

1. Detail Selection

   The student should be able to identify appropriate types of details to describe a subject. This skill includes the ability to use appropriate choices from the five senses to generate those details.

2. Elaboration

   The student should be able to expand upon the descriptive details by providing additional specific information.

DESCRIPTION REVISION CHECKLIST

Directions: Use this checklist to assist you in writing your composition.

COMPOSITIONAL ELEMENTS

_____Purpose

clearly stated
The composition describes something or someone using appropriate details.

_____Topic

on the assigned topic
The composition addresses the topic required by the writing task.

_____Audience

specified audience appropriately addressed
The tone of the composition and the language used are appropriate for the intended readers. (For example, slang could be used when writing to classmates but not in writing to the principal.)

_____Content

appropriate types of details
The composition uses sensory and other relevant details.

sufficient amount of elaboration
The composition uses enough and varied details.

_____Organization

unified focus
The entire composition is on one subject and does not wander.

beginning, middle, and end
The composition introduces the topic to the reader, discusses the topic, and brings the topic to conclusion.

smooth flow
The composition flows smoothly from idea to idea.

development
The composition sufficiently develops the topic.

_____Form

handwriting
The composition is legible.

mechanics
The punctuation, capitalization, and spelling are correct.

word usage
Words are used in the appropriate context. There is subject-verb agreement, correct pronoun usage, etc.

sentence formation
Sentences are complete with subjects and predicates. There are no run-ons or fragments.

TRADE AND INDUSTRIAL EDUCATION

Course: Small Engines

Unit: Four Cycle Engine

Competency: Theory of engine operation.

Performance Objective:

The student will write a description composition for the high school newspaper explaining the operation of the four cycle small gasoline engine.

Basic Skill: Writing

Basic Skill Objective:

The student can write a description composition conforming to the purpose, topic, audience, content, organization and form as specified on the description revision checklist.

Instructional Activities:

1. Explain to a high school audience the complete operation of the four cycle small gasoline engine.
   A. Identify the purpose of the writing task. (description)
   B. Select a specific topic. (four cycle small gasoline engine operation)
   C. Identify the audience. (high school students)
   D. Present detail information needed. (factual and sequence of events)
   E. Develop a plan. (organization)
2. Using the Description Revision Checklist as a guide, write a newspaper article on the four cycle small gasoline engine operation.
3. Pay close attention to the following:
   A. Purpose
   B. Topic
   C. Audience
   D. Content
   E. Organization
   F. Form

Instructional Materials Required:

Chalk Board
Description Revision Checklist

Evaluation:

Description newspaper article will meet all criteria on the Description Revision Checklist.

EXPOSITION

Definition

Expository writing is defined as communicating an understandable explanation. Exposition is a wide range of applications and may be used to explain (a) factual information, (b) ideas and opinions, or (c) steps of a process through directions.

Explaining factual information requires the presentation of sufficient, specific, and relevant facts, often organized with a topic sentence and supporting details. Explaining ideas and opinions follows a similar structure, requiring the statement of a point of view supported by relevant details. Giving directions requires the presentation of the steps to be taken in completing a process of carrying out an activity. This latter type of exposition often includes elements of narration because sequential order is almost always a part of any set of directions.

Specific Skills

1. Generalization

   The student should be able to develop broad statements that incorporate a group of details. Creating a topic sentence and sentences containing logically related details are examples of this specific skill.

2. Selection of Details

   The student should be able to select details to include or exclude in an expository piece of writing based on how closely the details are related to or support the topic being explained.

3. Activity Analysis

   The student should be able to analyze an activity or process from beginning to end, isolating each step needed to carry out the task.

EXPOSITION REVISION CHECKLIST

Directions: Use this checklist to assist you in writing your composition.

COMPOSITIONAL ELEMENTS

_____Purpose

clearly stated
The composition provides a clear explanation.

_____Topic

on the assigned topic
The composition addresses the topic required by the writing task.

_____Audience

specified audience appropriately addressed
The tone of the composition and the language used are appropriate for the intended readers. (For example, slang could be used when writing to classmates but not in writing to the principal.)

_____Content

appropriate organization for type of exposition
The composition contains (1) topic sentence and supporting details for explaining both factual information and ideas and opinions or (2) steps presented in a logical order for giving directions.

clearly explained information
The composition is developed from the topic sentence using specific facts, supporting details, or sub-steps to clarify what is explained.

enough information to explain the topic adequately
The composition contains sufficient information so that the reader understands what is being explained.

_____Organization

unified focus
The entire composition is on one subject and does not wander.

beginning, middle, and end
The composition introduces the topic to the reader, discusses the topic, and brings the topic to conclusion.

smooth flow
The composition flows smoothly from idea to idea.

development
The composition sufficiently develops the topic.

_____Form

handwriting
The composition is legible.

mechanics
The punctuation, capitalization, and spelling are correct.

word usage
Words are used in the appropriate context. There is subject-verb agreement, correct pronoun usage, etc.

sentence formation
Sentences are complete with subjects and predicates. There are no run-ons or fragments.

HOME ECONOMICS EDUCATION

Course: Human Sexuality II

Unit: Comprehension of Factors Relevant to Planning Parenthood

Competency: Recognize problems associated with teenage pregnancy.

Performance Objective:

Following instruction and classroom discussion, the student will write a composition which will:
- list three problems that a single, teenage parent must face;
- analyze the implications, both physical and emotional, of teenage pregnancy;
- discuss whether or not adolescents can be good parents.

Basic Skill: Writing

Basic Skill Objective:

The student can write an exposition composition conforming to the purpose, topic, audience, content, organization and form as specified on the exposition revision checklist.

Instructional Activities:

1. Read and discuss textbook selections on Teenage Pregnancy, Family Life, Pregnancy and Birth, and Sexual Health Care.
2. In classroom groups, analyze selected case studies related to teenage pregnancy/parenthood.
3. Divide class in half, conduct a pro and con debate on the issue of abortion versus adoption.
4. Have each student write a composition on the problems of teenage pregnancy.
5. Collect papers and discuss as a class.

Instructional Materials Required:

Human Sexuality textbooks/references
Winship, Caparulo and Harlin. Masculinity and Femininity. Boston: Houghton Mifflin Company
Riker and Riker. Finding My Way. Illinois: Bennett and McKnight Publishing Company

Evaluation:

The exposition has correctly adhered to the criteria listed in the checklist.

PERSUASION

Definition

Persuasive writing is defined as convincing a particular audience to take a desired course of action by communicating a thesis and supporting reasons. In other words, persuasive writing attempts to influence an audience by presenting reasons which the writer feels will persuade the reader to think or act in a certain way. The reasons presented for the desired course of action may be factual, or they may consist of pertinent opinions and points of view. Because different audiences will be persuaded in different ways, a writer must adapt writing specifically to the readers for whom it is intended.

Persuasion requires a writer to be attentive to three major considerations. First, there must be a thesis. Second, there must be support for the thesis. Third, the support that is selected and the manner in which it is presented must be appropriate for the specified audience.

Specific Skills

1. Thesis Communication

   The student should be able to identify and clearly express the thesis of the composition. The composition must take a clear stand on an issue.

2. Evaluation of Support

   The student should be able to judge whether information supports a particular thesis or contention. This information may be relevant factual evidence, opinions, and/or psychological appeals to the reader. To support a thesis, information must make the acceptance of that thesis seem desirable.

3. Audience Analysis

   The student should be able to analyze the nature of a particular audience in order to determine the specific arguments that will appeal to that audience.

PERSUASION REVISION CHECKLIST

Directions: Use this checklist to assist you in writing your composition.

COMPOSITIONAL ELEMENTS

_____Purpose

clearly stated
The composition presents reasons and/or evidence to convince or persuade.

_____Topic

on the assigned topic
The composition addresses the topic required by the writing task.

_____Audience

specified audience appropriately addressed
The tone of the composition and the language used are appropriate for the intended readers. (For example, slang could be used when writing to classmates but not in writing to the principal.)

_____Content

clear thesis
The composition states a clear point of view or position.

well-developed relevant and supportive information
The details and supportive information for the thesis are directly related to the topic or point of view.

arguments relevant to the audience addressed
The supportive information for the point of view taken appeals to the intended audience.

_____Organization

unified focus
The entire composition is on one subject and does not wander.

beginning, middle, and end
The composition introduces the topic to the reader, discusses the topic, and brings the topic to conclusion.

smooth flow
The composition flows smoothly from idea to idea.

development
The composition sufficiently supports the thesis.

_____Form

handwriting
The composition is legible.

mechanics
The punctuation, capitalization, and spelling are correct.

word usage
Words are used in the appropriate context. There is subject-verb agreement, correct pronoun usage, etc.

sentence formation
Sentences are complete with subjects and predicates. There are no run-ons or fragments.

TRADE AND INDUSTRIAL EDUCATION

Course: Small Engines

Unit: Motorcycle Engines

Competency: Engine types.

Performance Objective:

Upon completion of instruction, the student will be able to describe in writing the procedure to follow in starting a two cycle gas engine as used in motorcycles.

Basic Skill: Writing

Basic Skill Objective:

The student can write an exposition composition conforming to the purpose, topic, audience, content, organization and form as specified on the exposition revision checklist.

Instructional Activities:

1. Explaining factual information requires the presentation of sufficient, specific, and relevant facts, often organized with a topic sentence and supporting details. Giving directions requires the presentation of the steps to be taken in completing a process or carrying out an activity. This often includes narration because sequential order is almost always a part of any set of directions.
   a. Identify the purpose of the writing task. (EXPLAIN)
   b. Select a specific topic. (STARTING A TWO CYCLE MOTORCYCLE ENGINE)
   c. Identify the audience. (TYPICAL CUSTOMER, 16 to 23 years old)
   d. Determine information needed. (REASONS, factual, opinions, ideas, etc.)
   e. Develop a plan. (ORGANIZATION)
2. Model step 1 on the board for starting a car engine.
3. Have class as a group perform step 1 for a lawn mower engine.
4. Using the exposition revision checklist as a guide write an understandable procedure for starting a two cycle motorcycle engine. You are writing to your friends who are 16 to 23 years old.
5. Pay close attention to the following:
   a. Purpose
   b. Topic
   c. Audience
   d. Content
   e. Organization
   f. Form

Instructional Materials Required:

Chalk Board
Exposition Revision Checklist

Evaluation:

Exposition composition will meet all criteria on the exposition revision checklist.

TEACHING AND TESTING OUR BASIC SKILLS

MATHEMATICS

OBJECTIVE: Concepts **GRADE: 9-12**

Objective

The student can apply numerical concepts.

Suggested Measurement Strategy

Answering questions about numerical quantities and representations. These questions may require comprehending mathematical symbols and terminology, identifying equivalent ways of expressing the same numerical quantity, establishing relationships between numerical quantities, estimating, determining place value, creating or comparing sets, using formulas, developing or interpreting graphs, using tables, or establishing ratios or proportions.

AGRICULTURAL EDUCATION

Course: Agricultural Production, Business Management

Unit: Agricultural Mechanics

Competency: Use a transit to layout a typical terrace.

Performance Objective:

Given a set of abbreviated field notes, a chart for terrace spacing, and the formulas for determining slope and terrace spacing--the student will determine the rod readings in feet and tenths and in feet and inches required for an upper and lower terrace and the surface distance between the terraces.

Basic Skill: Mathematics

Basic Skill Objective:

The student can apply numerical concepts.

Instructional Activities:

1. Pass out information sheet which contains (a) rod readings of two stations which represent the slope, (b) the distance between stations, (c) rod reading of the base terrace, and (d) the formulas for determining percent slope and terrace spacing.
2. Provide the students with a guide chart for terrace spacing.
3. With class discussion, a sample problem will be worked out using the provided information to determine the rod readings for the upper and lower terraces in feet and tenths and in feet and inches, and the surface distance between terrace centers.
4. Student work will be checked and additional assistance will be provided as necessary.
5. A second sample will be passed out and without discussion the student will work the problem as before.
6. The second sample will be taken up. Discuss and answer questions.

Instructional Materials Required:

Two information sheets
Guide chart for terrace spacing

Evaluation:

The student will correctly determine the rod reading of an upper and lower terrace in feet and tenths and in feet and inches, and the surface distance between terraces.

Table 41.1--Guide for Terrace Spacings [1,2]

Slope of Area Draining into Terraces (%)	Vertical Interval Between Terraces: For Rod Graduated in Ft. and 10ths	Vertical Interval Between Terraces: For Rod Graduated in Ft. and in.	Surface Distance Between Terrace Centers (Ft.)
1	1.3	1:4	130
2	2.1	2:1	105
3	2.8	2:10	93
4	3.4	3:5	85
5	4.0	4:0	80
6	4.4	4:5	74
7	4.8	4:10	70
8	5.2	5:2	66
9	5.6	5:7	63
10	6.0	6:0	60
11	6.2	6:2	57
12	6.4	6:5	54
15	8.0	8:0	54
20	10.5	10:7	54

[1]Marion Clark and J. C. Wooley, "Terracing for Erosion Control," College of Agriculture Experiment Station, University of Missouri, Bul. 507, pp. 21-22.

[2]Variations from the table are to be discouraged, but when special soil conditions and a known future cropping plan warrant the change, spacings may be varied from the table as much as 20 percent.

Information Sheet #1:

Slope determination

Station	Rod Reading
A	5.6 (5:7) (ft.:in.)
A + 100'	8.6 (8:7) (ft.:in.)

Station A is the base terrace.

Formulas: % slope = $\frac{A-B}{D} \times 100$

A=Higher reading
B=Lower reading
D=Distance between stations

Next terrace = X $\pm$ V1

X=Base terrace
V1=Vertical interval as determined by the slope. Add for lower terrace; subtract for upper terrace.

Upper terrace _____ feet and tenths
_____ feet and inches
_____ surface distance

Lower terrace _____ feet and tenths
_____ feet and inches
_____ surface distance

Information Sheet #2:

Station	Rod Reading
A	3:6
A + 50	5:6

Station A is the base terrace.

Upper terrace _____ feet and tenths
_____ feet and inches
_____ surface distance

Lower terrace _____ feet and tenths
_____ feet and inches
_____ surface distance

TEACHING AND TESTING OUR BASIC SKILLS

MATHEMATICS

OBJECTIVE: Operations GRADE: 9-12

Objective

The student can compute accurately.

Suggested Measurement Strategy

Determining the answers to exercises requiring a mathematical operation. The exercises to be solved may require adding, subtracting, multiplying, or dividing whole numbers, signed numbers, fractions, mixed numbers, decimals, or percents, or extracting square roots.

TRADE AND INDUSTRIAL EDUCATION

Course: Small Engine Repair

Unit: Displacement

Competency: Calcuate cubic inch displacement.

Performance Objective:

The student will be able to correctly calculate the cubic inch displacement of a small gasoline engine using the formula D = B2/4 x 3.1416 x 5.

Basic Skill: Mathematics

Basic Skill Objective:

The student can compute accurately.

Instructional Activities:

1. Demonstrate how to compute displacement.
2. Define the terms:
   A. Bore
   B. Stroke
   C. Diameter
   D. Cylinder
3. A group will compute displacement for a small gasoline engine that has a bore of 2" and a stroke of 2".

Instructional Materials Required:

Chalk Board
Small Gas Engines, Roth, The Goodheart-Willcox Inc., 1981

Evaluation:

1. Compute the cubic inch displacement of a small gasoline engine that has a bore of 4" and a stroke of 3" using the formula D = B2/4 x 3.1416 x 5.

2. Using the formula D = $B^2/4$ x 3.1416 x 5, compute the cubic inch displacement for the following engines:

   a. Bore 4" - stroke 2"
   b. Bore 2.5 - stroke 3.3
   c. Bore 3.75 - stroke 2.6
   d. Bore 4.062 - stroke 3.5

MATHEMATICS

OBJECTIVE: Measurement **GRADE: 9-12**

Objective

The student can apply measurement concepts.

Suggested Measurement Strategy

Answering questions about measurement. These questions may require selecting an appropriate measurement unit or measuring device; estimating or measuring length, weight, volume, or temperature in metric or customary units; converting units within a measurement system; performing calculations with measured quantities; or interpreting scale drawings.

TRADE AND INDUSTRIAL EDUCATION

Course: Air Conditioning and Refrigeration I

Unit: Electrical system service

Competency: Read resistance color code and properly use the ohmmeter.

Performance Objective:

Upon completion of instruction, the student will be able to determine resistance values by reading the color code or through the use of an ohmmeter.

Basic Skill: Mathematics

Basic Skill Objective:

The student can apply measurement concepts.

Instructional Activities:

1. Need to develop a standard system.
2. Electronic Industries Association (EIA) color code.
3. Resistor types.
   - Class A Axial leads
   - Class B Radial Lead dot
   - Class C Radial Lead bank
4. Color code chart.

MULTIPLER	TOLERANCE %	SIGNIFICANT FIGURES	COLOR
1	-	0	Black
10	-	1	Brown
100	-	2	Red
1000	-	3	Orange
10,000	-	4	Yellow
100,000	-	5	Green
1,000,000	-	6	Blue
10,000,000	-	7	Violet
100,000,000	-	8	Gray
1,000,000,000	-	9	White
0.1	5	-	Gold
0.01	10	-	Silver
-	20	-	No Color

5. Conduct guided group practice.

6. Closure:
   What is the value of each resistor color coded as follows:
   a. red, violet, silver .27 ohms
   b. brown, black, orange 10,000 ohms
   c. green, blue, gold 5.6 ohms
   What is the color code for each of the following resistors?
   a. 47 ohms yellow, violet, black
   b. 56.000 ohms green, blue, orange
   c. 2,200 ohms red, red, red
7. Model the use of the ohmmeter.
   Zero adjust
   Ranges (scales)
   POWER OFF
8. To protect the ohmmeter always measure resistance with the power off.
9. Use work sheet #5.01.03.

Instructional Materials Required:

Ohmmeter
Assorted type A resistors
Chalk Board
Job Sheet # AR 3.2.1

Evaluation:

Student will record the correct value of type A resistors by reading the color code and then properly use an ohmmeter to measure the resistance of the same resistors.

Job Sheet #AR 3.2.1 Name_____

Objective:

To learn the Electronic Industries Association (EIA) color code. To gain practice in the use of the ohmmeter.

Narrative Description

Resistance values are indicated by a standard color code adopted by manufacturers. This code involves the use of color bands or dots on the body of the resistor. The colors and the numerical values are given in the resistor color chart below.

MULTIPLER	TOLERANCE %	SIGNIFICANT FIGURES	COLOR
1	-	0	Black
10	-	1	Brown
100	-	2	Red
1000	-	3	Orange
10,000	-	4	Yellow
100,000	-	5	Green
1,000,000	-	6	Blue
10,000,000	-	7	Violet
100,000,000	-	8	Gray
1,000,000,000	-	9	White
0.1	5	-	Gold
0.01	10	-	Silver
-	20	-	No Color

The color of the first band tells the first significant figure of the resistor. The color of the second band tells the second significant figure. The color of the third band tells the multiplier. A fourth band is used to designate tolerance. If the value is less than one ohm, the multiplier band is silver; if the value is greater than one but less than ten, the multiplier is gold.

Materials Required:

Ohmmeter
Five assorted type A resistors

Procedure:

1. Determine and record the value of each resistor by reading the color code.
2. Zero the ohmmeter.
3. Measure each resistor with the ohmmeter and record the measured value.

Resistor Number	color code value	measured value
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____

4. Are the measured values within the tolerance range of the resistor?
5. If the color bands are red, black, brown and the measured resistance is infinite ohms, what is the condition of the resistor?

TEACHING AND TESTING OUR BASIC SKILLS

MATHEMATICS

OBJECTIVE: Geomerty **GRADE: 9-12**

Objective

The student can apply geometric concepts.

Suggested Measurement Strategy

Answering questions about geometric representations. These questions may require identifying, comparing, or constructing geometic figures; identifying properties of geometric figures, using the Pythagorean relationship; or determining the perimeters, areas, or volumes of geometric figures.

HOME ECONOMICS EDUCATION

Course: Housing and Home Furnishings/Housing and Home Furnishings Services I

Unit: Working with floor plans and room arrangements

Competency: Measure a room and draw to scale.

Performance Objective:

Given instruction in room dimensions and scaled measurements, the student will be able to accurately measure dimensions of a room and convert the measurements into scaled measurements to draw the room.

Basic Skill: Mathematics

The student can apply geometric concepts.

Instructional Activities:

1. Using Housing and Home Furnishings text, read and discuss room dimensions and scaled measurements.
2. Students should practice drawing a room to scale by using the attached example.
3. Students will measure the living room at home and convert the measurements into scaled measurements and draw the room on graph paper.
4. Collect all papers, grade and discuss.

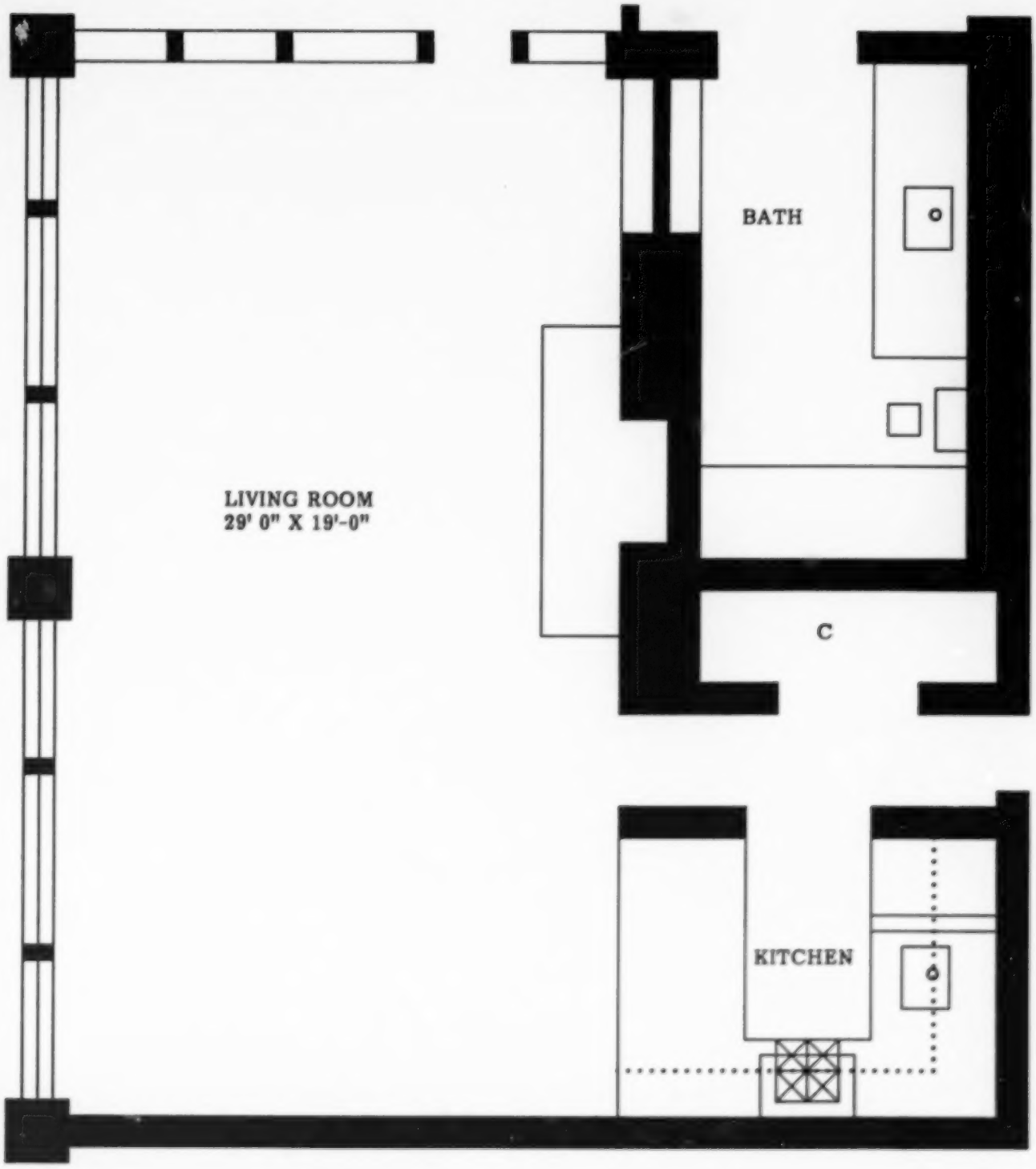
Instructional Material Required:

Housing and Home Furnishings text
Floor Plan and Graph handout sheet
Rulers
Sherwood, Ruth F., Home Today and Tomorrow Student Guide, Peoria, Illinois: Chas. A. Bennett Co. Inc., 1975.

Evaluation:

The student will correctly draw a room to scale by measuring the room and converting the measurement into scaled measurement.

Project 3-5
Floor Plan For Living Room

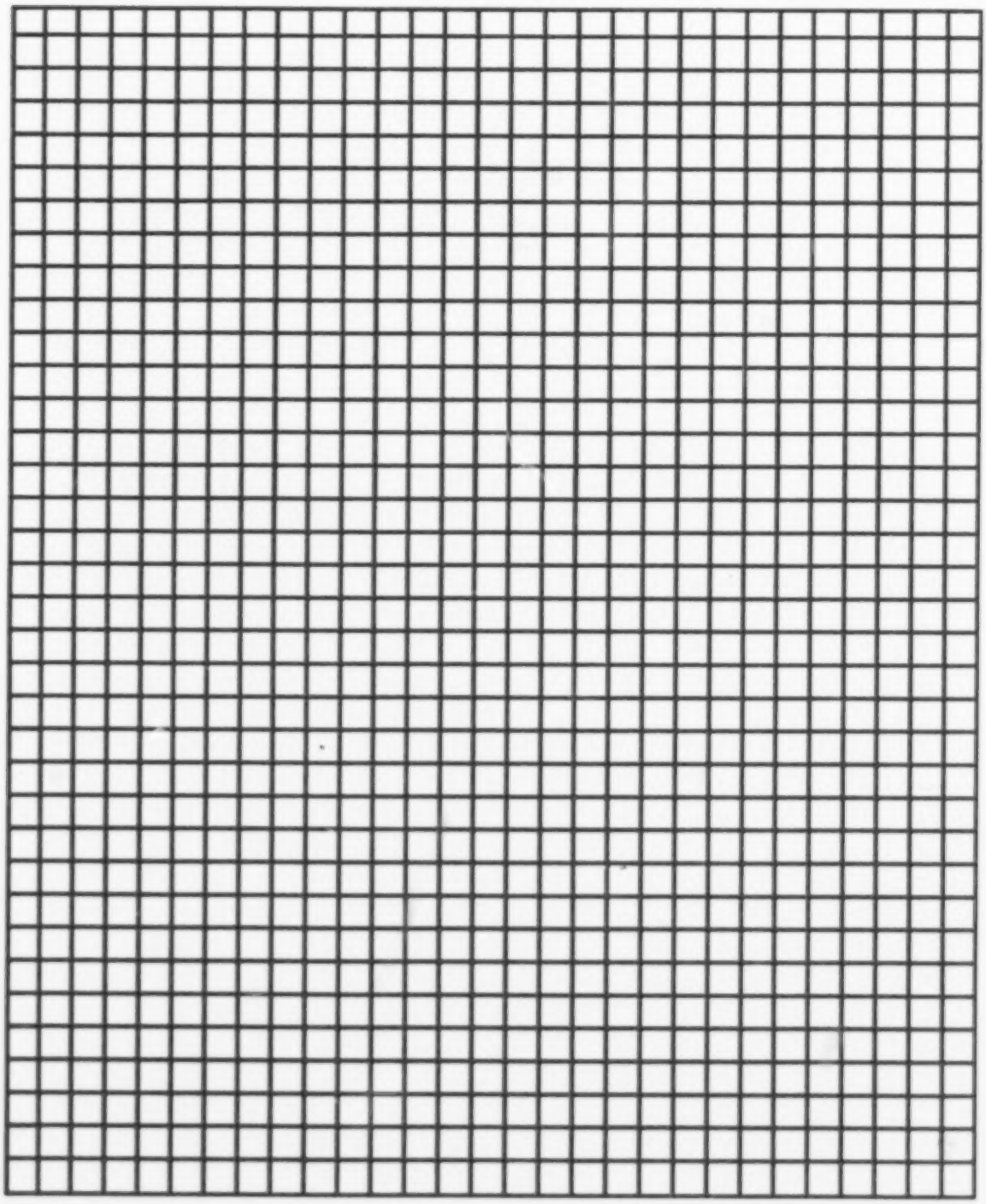


Date _____ Name _____

Project 3-5

Furniture Arrangement for Living-Dining Area

Scale _____



TEACHING AND TESTING OUR BASIC SKILLS

MATHEMATICS

OBJECTIVE: Problem Solving **GRADE: 9-12**

Objective

The student can solve problems requiring the use of mathematics.

Suggested Measurement Strategy

Determining the solutions to verbal and nonverbal problems. These problems may require performing one or more mathematical operations with whole numbers, fractions, mixed numbers, decimals, percents, or measurement units. The problems may also require applying a formula and/or using information presented graphically. Problems will focus on situations which may be encountered by students now or in adult life, including those situations requiring consumer and producer skills.

AGRICULTURAL EDUCATION

Course: Agricultural Production, Business Management

Unit: Farm Management and Recordkeeping

Competency: Calculate and record depreciation.

Performance Objective:

Given an original cost, salvage value, and life expectancy, the student will calculate and determine the method of depreciation which will maximize the benefits for a given situation.

Basic Skill: Mathematics

Basic Skill Objective:

The student can solve problems requiring the use of mathematics.

Instructional Activities:

1. Define and discuss the term depreciation, its use, and its purpose.
2. Demonstrate and discuss the following depreciation methods.
   a. straight-line.
   b. double declining balance.
   c. sum of the digits.
3. Pass out a formula sheet.
4. Pass out sample problem number one and have the students work the problem.
5. Monitor the work, answer questions, and make on-the-spot corrections.
6. Discuss the results and provide the solution.
7. Pass out the second problem, and have the students work the problem without assistance.
8. Collect the papers, and discuss the results. Describe the advantages and disadvantages of each depreciation method.

Instructional Materials Required:

Two sample depreciation problems with an income tax management situation
Depreciation formula sheet
Farm Business Management textbook

Evaluation:

The student will accurately calculate the depreciation values and correctly determine the method of depreciation to benefit the given situation.

Formula Sheet:

Straight Line $Ds = \frac{O-S}{Y}$

Ds = depreciation for the year (straight line method)
O = original cost or cost basis
S = salvage value at end of life
Y = years of useful life (estimated)

Double Declining Balance

$Dd = VxR$

Dd = depreciation for the year (declining balance method)
V = value at beginning of the depreciation period
R = rate of depreciation (may be up to twice the rate allowed under straight line)

Sum of the Digits

$Dy = \frac{Yr}{SD}(O-S)$

Dy = depreciation for the year (sum-of-the-years digits method)
Yr = years of useful life remaining at the beginning of the year for which the computation is being made
SD = sum of the years digits for the life of the item
O = original cost or cost basis
S = salvage value

Problem #1

An $80,000 tractor with a useful life of ten years and a salvage value of $10,000 would be best depreciated by which method to provide the greatest write-off early? Calculate each method for the first year to prove your answer.

Solution - #1

Straight-line $\frac{80,000-10,000}{10} = \$7,000$

Double Declining Balance 80,000 x .2 = $16,000

Sum of the Digits $\frac{10}{55} \times (80,000-10,000) = \$12,727.27$

The best method for this situation would be the declining balance.

Problem #2

For a $90,000 skidder with a useful life of five years and a salvage value of $5,000, what would be the best method of depreciation to preserve more of the costs for the later years of its life? Prove your answer by calculating all the years.

Solution #2

Straight Line $\frac{(90,000-5,000)}{5} = \$17,000$ all years

Double Declining Balance
1/1 90,000 x .4 = $36,000
1/2 54,000 x .4 = $21,600
1/3 32,400 x .4 = $12,960
1/4 19,440 x .4 = $ 7,776
1/5 11,664 x .4 = $ 4,665.6
Salvage value = $ 6,998.4

Sum of the Digits
1/1 5/15 x (90,000-5,000) = $28,333.33
1/2 4/15 x (90,000-5,000) = $22,666.66
1/3 3/15 x (90,000-5,000) = $17,000.00
1/4 2/15 x (90,000-5,000) = $11,333.33
1/5 1/15 x (90,000-5,000) = $ 5,666.61

WHAT OTHER RESOURCES ARE AVAILABLE?

The Office of Vocational Education has reviewed the following resources and suggests their use in reinforcing basic skills in vocational education.

Basic Skills Instruction in Vocational Education, A Staff Development Program. R & R Evaluations, Inc., 316 Church Street, Decatur, GA 30030. Phone: (404) 378-4747.

The centerpiece of this program is a video tape with thirteen segments focusing on a major basic skills area set in different vocational classes. A short promotional videotape is available from the company or from the Office of Vocational Education. (Should you decide to purchase this series, please order through Dr. Bob Benson at the Office of Vocational Education, phone 737-2742.)

State Objectives: Reading, Writing, and Mathematics, Grades K-12. The South Carolina Department of Education. The foundation for basic skills in the South Carolina educational system is outlined in this handbook. Required reading.

Teaching and Testing Our Basic Skills Objectives. The South Carolina Department of Education. Reading, Grades 9-12, Mathematics, Grades 9-12, and Writing, Grades 4-12.

The purpose of Teaching and Testing Our Basic Skills Objectives is to provide educators with a tool for curriculum and instructional development which compliments the assessment of the state objectives. The nucleus for enhancing basic skills in vocational education is found in this guide.

Improving the Basic Skills of Vocational Technical Students: An Administrator's Guide. American Association for Vocational Instructional Materials. The University of Georgia, 120 Driftmier Engineering Center, Athens, GA 30602. Phone: (404) 542-2586.

This guide was developed by the National Center for Research in Vocational Education under the sponsorship of a multi-state consortium; it offers information and guidelines that vocational-technical administrators can use to help prepare for improvement in basic skills. No point stands out more clearly than the importance of the administrator's role in bringing about this improvement. The guide is divided into four parts: Background on Basic Skills, Types of Basic Skills Programs, Planning for Basic Skills Improvement, and Implementation and Evaluation.

Resource Guide and Teacher Guide, Teaching Basic Skills Through Vocational Education. James A. Dunn, Director, Cornell Institute for Occupational Education, Stone Hall, Cornell University, Ithaca, NY 14853. Phone: (607) 256-6515.

The two guides offer concrete, easy-to-understand information which encourages the vocational teacher to emphasize basic skills. Twenty-five lesson ideas are outlined in detail to assist the teacher in developing lesson plans incorporating basic skills in specific vocational courses.

Building Basic Skills: Models for Implementation. The National Center for Research in Vocational Education. National Center Publications, Box F, 1960 Kenny Road, Columbus, OH 43210. Phone: 1-800-848-4815.

Three models for delivering basic skills instruction in conjunction with vocational education are presented in this report. Using a case study approach, it examines the process, at the local district level, of selecting, planning, and implementing a basic skills delivery model.

Building Basic Skills: Results from Vocational Education. The National Center for Research in Vocational Education. National Center Publications, Box F, 1960 Kenny Road, Columbus, OH 43210. Phone: 1-800-848-4815.

Two questions are addressed in this study:

What are the basic skills proficiencies of vocational students?

What practices involving vocational education are currently in use for remediating and reinforcing basic skills?

In the final section, the author discusses future research issues, policy implications, and recommendations.

Building Basic Skills: The Dropout. The National Center for Research in Vocational Education. National Center Publications, Box F, 1960 Kenny Road, Columbus, OH 43210. Phone: 1-800-848-4815.

Vocational education, compiled with a strong basic skills program, is perhaps the only means available within the context of public education to alleviate the dropout problem. Practices are presented to reinforce basic skills, or to remedy basic skills deficiencies, which provide useful information to both teachers and administrators interested in strengthening basic skills through vocational education.

A Handbook of Basic Skills in Vocational Education. A Mendocino County Schools Curriculum Guide, prepared by the Special Education Department and the Regional Occupational Program, Ukiah, CA.

One of the goals of this publication is to provide Regional Occupational Program instructors with a planning tool to enhance the academic skills of their students, especially those having difficulty passing high school competency exams. It is an example of one county's efforts to strengthen communications among special education, vocational education, and academic education.

Basic Skills Improvement - A Handbook for Reading, Math, Writing and Oral Communication. The Vocational Studies Center. University of Wisconsin-Madison, 964 Educational Sciences Building, 1025 West Johnson Street, Madison, WI 53706.

Ideas, guidelines, and resources for planning basic skills improvement programs from across the nation are provided in this handbook. It is designed for use by those with or without expertise in teaching basic skills.

Professional Teacher Education Module Series:

M-1: Assist Students in Achieving Basic Reading Skills

M-2: Assist Students in Developing Technical Reading Skills

M-3: Assist Students in Improving Their Writing Skills

M-4: Assist Students in Improving Their Oral Communication Skills

M-5: Assist Students in Improving Their Math Skills

M-6: Assist Students in Improving Their Survival Skills

Developed and field tested by the National Center for Research in Vocational Education under the sponsorship of the United States Department of Education. American Association for Vocational Instructional Materials. The University of Georgia, 120 Driftmier Engineering Center, Athens, GA 30602. Phone: (404) 542-2586.

The design of the six modules provides flexibility for planning and conducting training for preservice and inservice teachers in the integration of basic skills in regular vocational instruction. They are designed for the professional development of vocational teachers.

Teaching Reading in Vocational Education. The South Carolina Department of Education. The intention of this handbook on reading skills for vocational classes is to identify activities for developing reading skills needed by students in vocational education programs. Strategies are presented which enable students to make better use of printed resources.

Applied Vocational Mathematics. The South Carolina Department of Education. Numerous practical applications of mathematical principles are provided as the core of the learning activities of this text. It was developed to aid the high school instructor in teaching mathematical problem-solving and computational skills to vocational students.

Integration of Academic and Vocational-Technical Education: An Administrator's Guide. American Association for Vocational Instructional Materials. The University of Georgia, 120 Driftmier Engineering Center, Athens, GA 30602. Phone: (404) 542-2586.

This guide was developed by the National Center for Research in Vocational Education under the sponsorship of a multi-state consortium. Both the dream of excellence in education and the reality of human capabilities are examined. The tools administrators need to plan and implement an effective integrated program are presented. The last section describes model programs with details about how the programs were set up and what barriers and facilitators to implementation were discovered.

A Nation at Risk: The Imperative for Educational Reform. The National Commission on Excellence in Education. April, 1983.

A Nation at Risk is a dynamic report which examines the quality of education in the United States. It presents a thought-provoking challenge to the American people to return to excellence in education.

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